

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number
WO 2005/075838 A2

(51) International Patent Classification⁷: F15D 1/12,
B63H 1/18

(74) Agent: **FISCHER, Michael**; Siemens AG, Postfach 22 16
34, 80506 München (DE).

(21) International Application Number:
PCT/EP2004/009160

(22) International Filing Date: 16 August 2004 (16.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/542,292 9 February 2004 (09.02.2004) US

(71) Applicant (*for all designated States except US*): **PAUL SCHERRER INSTITUT** [—/CH]; CH-5232 Villigen PSI (CH).

(72) Inventor; and

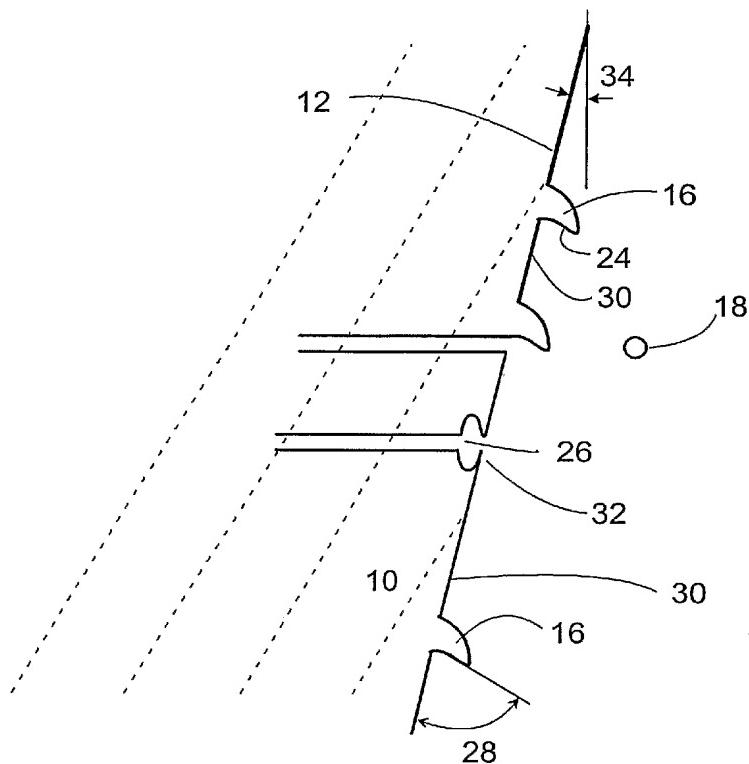
(75) Inventor/Applicant (*for US only*): **THOMSEN, Knud** [AT/CH]; Lenggstrasse 7, CH-5322 Koblenz (CH).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: PROTECTION OF SURFACES AGAINST CAVITATION EROSION



(57) Abstract: The present invention is directed to protection of an water solid interface from cavitation, pitting and the like. The protection is made by the introduction and maintaining of bubbles on and/or along the surface of the solid exposed to the liquid. To facilitate the maintaining, selectively placed protrusions and other deformations to the surface are introduced along with a bubble source. The present invention is further directed to a process for achieving the protection.

WO 2005/075838 A2



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *without international search report and to be republished upon receipt of that report*